Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

more than that among those who worked fewer hours. Working females in our study had a higher likelihood (aOR=1.11, 95% CI=1.05:1.19) of using sleep aids when compared to males. At the same time, people working in professional services had the highest likelihood (aOR=1.31, 95% CI=1.14:1.50) of using sleep medications. ***Conclusions:*** Our study revealed that long working hours were significantly associated with an elevated use of sleep aids and medications with sedative properties among U.S. workers. Specifically, female workers and individuals working in professional services had the highest likelihood of using sleep medications.

EPH43
POTENTIAL ASSOCIATION OF REMDESIVIR AND HYPERKALEMIA: A DISPROPORTIONALITY ANALYSIS IN USFDA ADVERSE EVENT REPORTING SYSTEM DATABASE

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Background: Signal detection is one of the most advanced and promising techniques in the world of pharmacovigilance. Remdesivir is approved for emergency use by the US Food and Drug Administration (FDA) for patients with coronavirus disease 2019 (COVID-19). Its benefit- risk ratio is still being explored because data in the field are rather scant. On the other hand hyperkalemia is a potentially life-threatening electrolyte disorder. Severe hyperkalemia can occur suddenly and can cause life-threatening heart rhythm changes (arrhythmia) that cause a heart attack. Even mild hyperkalemia can cause heart related problems over time if not treated. ***Objectives:*** To evaluate the potential association of Remdesivir with risk of Hyperkalemia by analyzing the spontaneous reports through disproportionality analysis. ***Methods:*** Data were obtained from the public release of data in FAERS. Case/non-case method was adopted for the analysis of association between Remdesivir use and Hyperkalemia. The data-mining algorithm used for the analysis were Reporting Odds Ratio(ROR) and Proportional Reporting Ratio (PRR). A value of ROR-1.96SE>, PRR≥2 were considered as positive signal. ***Results:*** A total of 7 DE's associated with Remdesivir use and hyperkalemia were reported. The mean age of the patients of Remdesivir associated events was found to be 75 years [95% CI]. The reports by gender were distributed with a male to female ratio of 3:1, though gender was not revealed in 3 reports. The data mining algorithms exhibited positive signal for hyperkalemia (PRR: 2.349, ROR: 2.354) upon analysis as those were well above the pre-set threshold. Three case reports were identified which strengthened these findings and highlighted the importance of laboratory parameters for the early detection of hyperkalemia ***Conclusions:*** The current study found a potential risk of hyperkalemia with the use of Remdesivir and there is an urgent need to thoroughly investigate the same and take the necessary action to avoid or minimize the risk.

EPH44
ON THE FRONTLINE AGAINST COVID-19: PROVISION OF COMMUNITY PHARMACY SERVICES DURING A PUBLIC HEALTH CRISES

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Objectives: During the current pandemic, it is recognised that pharmacies will often be the first point of contact with the health system for individuals with **COVID-19** related health concerns or who require reliable information and advice. It is also important in the midst of the current public health crisis to reduce general practitioners' (GP) minor ailment-related workload. **The aim of our study** is to examine the problems in the midst of public health crisis of the current magnitude with the roles and activities of pharmacists. This information could help to inform future decisions about the restructuring of existing health services by governments, public health bodies and policy makers in response to public health crises such as **COVID-19.** ***Methods:*** The study was carried out among 384 consumers using pharmacy in the regions of Armenia and Yerevan. Research instrument was questionnaire. Number of questionnaires distribution was determined by The Survey System Version 11.0. Analyses were performed using Statistical Package for the Social Sciences (SPSS) software (version 12.0). ***Results:*** During the study it becomes clear that very few percentage of consumers **(17%) consulted by a pharmacy employees.** Most of them don't get the necessary information from the pharmacy employee about medicine. **Only 29 % of consumers are clearly satisfied** with the answers of a pharmacy employee and **26% fully trust them.** ***Conclusions:*** Steps should be taken for improving the professional knowledge of pharmacists about medicines and pharmaceutical care, which, in turn, can restore consumer trust in them, will help avoid self-medication errors by providing advice on medicines in response to public health crises such as **COVID-19.** There is a need to develop pharmaceutical care algorithms for minor ailments, national emergency drug formularies for **COVID-19.**

EPH45
ASSESSING THE PUBLIC HEALTH IMPACT OF THE ADJUVANTED RESPIRATORY SYNCYTIAL VIRUS PREFUSION F PROTEIN VACCINE AMONG OLDER ADULTS IN THE UNITED STATES (US)

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Objectives: The burden of respiratory syncytial virus (RSV) is substantial among older adults (OA), with previous research estimating 177,525 RSV-related hospitalizations and 14,000 RSV-related deaths each year in the US. This study estimates the public health impact of vaccinating US adults aged ≥60 years with a single dose of adjuvanted RSV prefusion F protein vaccine (RSVPreF3 OA). ***Methods:*** A Markov-cohort model with a 1-year time horizon was developed to compare health outcomes for scenarios with and without RSV vaccination, assuming the same vaccination coverage rates as for the influenza vaccines in the 2021-2022 season (52.4% among 60–64-year-olds, 73.9% among ≥65-year-olds). Population estimates, RSV epidemiology, and health care resource use inputs were obtained from standard US sources and published literature. Vaccine efficacy and waning rates were estimated from the AReSVi-006 phase 3 clinical trial. Sensitivity analyses were performed to test parameter uncertainty. ***Results:*** Without vaccination, RSV results in an estimated 3,031,750 symptomatic infections, 171,415 hospitalizations, and 13,919 deaths each year among US adults aged ≥60 years (n=81,001,651), with considerable burden observed across all age groups. Vaccinating 55,282,554 of these older adults is estimated to prevent 1,277,725 symptomatic RSV infections, including 673,835 cases of RSV lower respiratory tract disease each year. Vaccination is also expected to avoid 496,076 medically attended RSV cases, 94,984 hospitalizations, 23,278 emergency department visits, 87,293 pneumonia complications, 414,668 antibiotic prescriptions, and 7,743 deaths annually. Numbers needed to vaccinate to avoid one symptomatic RSV infection, RSV-related hospitalization, and RSV-related death are 43, 582 and 7,139, respectively. Results were consistent across sensitivity analyses. ***Conclusions:*** Vaccinating adults aged ≥60 years in the US with the adjuvanted RSVPreF3 OA vaccine is expected to have a significant public health impact by reducing RSV morbidity and mortality. Patient and health care provider education on RSV disease and vaccines will be important to support older adult RSV vaccination.

EPH46
THE ASSOCIATION BETWEEN VACCINE HESITANCY AND PERTUSSIS: A SYSTEMATIC REVIEW AND META-ANALYSIS

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Objectives: Robust routine immunization schedules of pertussis-containing vaccines have been applied for years, but the pertussis outbreak is still a worldwide problem. This study aimed to explore the association between vaccine hesitancy and pertussis in infants and children. ***Methods:*** We searched PubMed, Cochrane, Web of Science, Embase, and China National Knowledge Internet from January 2012 to June 2022 and included primary studies that assessed the association between childhood/maternal vaccine hesitancy and the pertussis odds ratios (ORs), risk ratios (RRs), or vaccine effectiveness (VE) in infants and children ≤9 years old. Random-effects meta-analysis, cumulative meta-analysis, and subgroup analysis were used to generate estimated OR/VEs with 95% confidence intervals (CIs), where heterogeneity was assessed using I^2. ***Results:*** Twenty-two studies were included in this analysis, with a mean quality score of 7.0 (range 6.0-9.0). Infants and children with pertussis were associated with higher vaccine hesitancy at all doses (OR = 4.12; 95% CI, 3.09-5.50). The highest OR was between children unvaccinated over 4 doses and children fully vaccinated (OR = 14.26; 95%CI, 7.62-26.70); childhood vaccine delay was not statistically significant associated with pertussis risk (OR = 1.18; 95% CI, 0.74-1.89). Maternal vaccine hesitancy was associated with significantly higher pertussis risk in infants at both 2 months and 3 months old, with higher OR in infants ≤2 months old (OR = 6.02 [95%CI: 4.31-8.50], OR = 5.14 [95%CI: 1.95-13.52] for infants ≤2 and 3 months old, respectively). Maternal and childhood pertussis-containing vaccination had significantly high VE both in preventing pertussis infection in infants and in reducing the severity of disease in infants with pertussis. The administration time of maternal vaccination had little effect on VE. ***Conclusions:*** Vaccine hesitancy increased pertussis risks in infants and children. Ensuring children receive pertussis vaccines up-to-date is essential; short delays in childhood vaccine receipt may be unimportant. Maternal pertussis-containing vaccination should be encouraged.

EPH47
ACTIVE SURVEILLANCE FOR SAFETY MONITORING OF COVID-19 VACCINES IN SAUDI ARABIA

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Objectives: It is generally accepted that the world will not return to the pre-pandemic normally situation until safe and effective vaccines become available. However, the rare and unknown adverse events following immunization (AEFIs) are not usually detected in the clinical trials. Thus, monitoring the safety of coronavirus disease of 2019 (COVID-19) vaccines in real-world population is essential. Therefore, the Saudi Food and Drug Authority (SFDA) performed a post-marketing safety surveillance of AEFIs following administration of COVID-19 vaccines. ***Methods:*** A prospective cohort study conducted and followed subjects who received COVID-19 vaccines from the first day of vaccination for seven days after the first and second doses, then biweekly for three months. All information from the vaccinee (demographic information, vaccine type and AEFIs) were collected by phone through a